

ELECTRONIC INFORMATION DISCLOSURE STATEMENT

Electronic Version v18

Stylesheet Version v18.0

Title of Invention

ADAPTIVE DE-BLOCKING FILTERING APPARATUS AND
METHOD FOR MPEG VIDEO DECODER

Application Number :

Confirmation Number:

First Named Applicant: Do-Kyoung Kwon

Attorney Docket Number: MTKP0167USA

Art Unit:

Examiner:

Search string: (6600839 or 6563958 or 6370279 or 6298161 or 6618510 or 6539060 or 6360024 or 6320905 or 6317522 or 6240135 or 6188799 or 6115503 or 6028967 or 5933541 or 20030219074 or 20030053708 or 20030044080 or 20020196856 or 20020118399 or 20020051496 or 20030219073 or 20030152146 or 20030202608 or 20030058944 or 20030053711).pn

US Patent Documents

Note: Applicant is not required to submit a paper copy of cited US Patent Documents

init	Cite.No.	Patent No.	Date	Patentee	Kind	Class	Subclass
/TV/	1	6600839	2003-07-29	Mancuso ,et al.			
/TV/	2	6563958	2003-05-13	Andrew			
/TV/	3	6370279	2002-04-09	Paik			
/TV/	4	6298161	2001-10-02	Koo , et al.			
/TV/	5	6618510	2003-09-09	Umiji			
/TV/	6	6539060	2003-03-25	Lee , et al.			
/TV/	7	6360024	2002-03-19	Tan , et al.			
/TV/	8	6320905	2001-11-20	Konstantinides			
/TV/	9	6317522	2001-11-13	Rackett			
/TV/	10	6240135	2001-05-29	Kim			
/TV/	11	6188799	2001-02-13	Tan ,et al.			
/TV/	12	6115503	2000-09-05	Kaup			
/TV/	13	6028967	2000-02-22	Kim , et al.			
/TV/	14	5933541	1999-08-03	Kutka ,et al.			

US Published Applications

Note: Applicant is not required to submit a paper copy of cited US Published Applications

init	Cite.No.	Pub. No.	Date	Applicant	Kind	Class	Subclass
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/TV/	1	20030219074	2003-11-27	Park, Jeong-hoon ;et al.			
/TV/	2	20030053708	2003-03-20	Kryukov, Sergei Nikolaevich ; et al.			
/TV/	3	20030044080	2003-03-06	Frishman, Eyal ; et al.			
/TV/	4	20020196856	2002-12-26	Miro Sorolla, Carolina ; et al.			
/TV/	5	20020118399	2002-08-29	Estevez, Miguel ; et al.			
/TV/	6	20020051496	2002-05-02	Hashimoto, Kohkichi			
/TV/	7	20030219073	2003-11-27	Lee, Yung-lyul ; et al.			
/TV/	8	20030152146	2003-08-14	Lin, Chih-Lung ; et al.			
/TV/	9	20030202608	2003-10-30	MacInnis, Alexander G. ; et al.			
/TV/	10	20030058944	2003-03-27	MacInnis, Alexander G. ; et al.			
/TV/	11	20030053711	2003-03-20	Kim, Changick			

Signature

Examiner Name	Date
/Tung Vo/	08/31/2007



JPW

PTO/SB/21 (08-03)

Approved for use through 08/30/2003. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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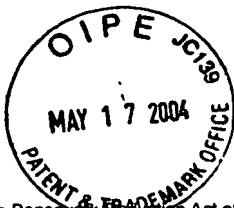
TRANSMITTAL FORM (to be used for all correspondence after initial filing)	Application Number	10/709,338	
	Filing Date	04/29/2004	
	First Named Inventor	Do-Kyoung Kwon	
	Art Unit		
	Examiner Name		
Total Number of Pages in This Submission	82	Attorney Docket Number	MTKP0167USA

ENCLOSURES (Check all that apply)		
<input checked="" type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment/Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input checked="" type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____	<input type="checkbox"/> After Allowance communication to Technology Center (TC) <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input type="checkbox"/> Other Enclosure(s) (please identify below):
Remarks		
SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT		
Firm or Individual name	Winston Hsu, Reg. No.: 41,526	
Signature	<i>Winston Hsu</i>	
Date	5/13/2004	

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PTO/SB/17 (10-03)

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FEE TRANSMITTAL for FY 2004

Effective 10/01/2003. Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$) 0.00

Complete if Known

Application Number 10/709,338
Filing Date 04/29/2004
First Named Inventor Do-Kyoung Kwon
Examiner Name
Art Unit
Attorney Docket No. MTKP0167USA

METHOD OF PAYMENT (check all that apply)

☐ Check ☐ Credit card ☐ Money Order ☐ Other ☐ None

☒ Deposit Account:

Deposit Account Number 50-3105
Deposit Account Name North America Intellectual Property Corp.

The Director is authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☒ Credit any overpayments

☒ Charge any additional fee(s) or any underpayment of fee(s)

☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.

FEE CALCULATION

1. BASIC FILING FEE

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
1001 770	2001 385	Utility filing fee	
1002 340	2002 170	Design filing fee	
1003 530	2003 265	Plant filing fee	
1004 770	2004 385	Reissue filing fee	
1005 160	2005 80	Provisional filing fee	
SUBTOTAL (1)			(\$) 0.00

2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

Total Claims Extra Claims Fee from below Fee Paid
Independent Claims -20** = X
Multiple Dependent Claims -3** = X

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description
1202 18	2202 9	Claims in excess of 20
1201 86	2201 43	Independent claims in excess of 3
1203 290	2203 145	Multiple dependent claim, if not paid
1204 86	2204 43	** Reissue independent claims over original patent
1205 18	2205 9	** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) (\$) 0.00

**or number previously paid, if greater; For Reissues, see above

FEE CALCULATION (continued)

3. ADDITIONAL FEES

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
1051 130	2051 65	Surcharge - late filing fee or oath	
1052 50	2052 25	Surcharge - late provisional filing fee or cover sheet	
1053 130	1053 130	Non-English specification	
1812 2,520	1812 2,520	For filing a request for <i>ex parte</i> reexamination	
1804 920*	1804 920*	Requesting publication of SIR prior to Examiner action	
1805 1,840*	1805 1,840*	Requesting publication of SIR after Examiner action	
1251 110	2251 55	Extension for reply within first month	
1252 420	2252 210	Extension for reply within second month	
1253 950	2253 475	Extension for reply within third month	
1254 1,480	2254 740	Extension for reply within fourth month	
1255 2,010	2255 1,005	Extension for reply within fifth month	
1401 330	2401 165	Notice of Appeal	
1402 330	2402 165	Filing a brief in support of an appeal	
1403 290	2403 145	Request for oral hearing	
1451 1,510	1451 1,510	Petition to institute a public use proceeding	
1452 110	2452 55	Petition to revive - unavoidable	
1453 1,330	2453 665	Petition to revive - unintentional	
1501 1,330	2501 665	Utility issue fee (or reissue)	
1502 480	2502 240	Design issue fee	
1503 640	2503 320	Plant issue fee	
1480 130	1480 130	Petitions to the Commissioner	
1807 50	1807 50	Processing fee under 37 CFR 1.17(q)	
1806 180	1806 180	Submission of Information Disclosure Stmt	
8021 40	8021 40	Recording each patent assignment per property (times number of properties)	
1809 770	2809 385	Filing a submission after final rejection (37 CFR 1.129(a))	
1810 770	2810 385	For each additional invention to be examined (37 CFR 1.129(b))	
1801 770	2801 385	Request for Continued Examination (RCE)	
1802 900	1802 900	Request for expedited examination of a design application	

Other fee (specify)

*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$) 0.00

SUBMITTED BY

Name (Print/Type) Winston Hsu Registration No. 41,526 Telephone 886289237350
Signature *Winston Hsu* (Attorney/Agent) Date 5/13/2004

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PTO/SB/08B (10-01)

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Substitute for form 1449B/PTO		Complete If Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number	10/709,338
		Filing Date	04/29/2004
		First Named Inventor	Do-Kyoung Kwon
		Group Art Unit	
		Examiner Name	
		Attorney Docket Number	MTKP0167USA
Sheet	1	of	1

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
/TV/	1	R.ROSENHOLTZ, A. ZAKHOR; Iterative procedures for reduction of blocking effects in transform image coding; IEEE TRANS. Circuits Syst. Video Technol; Mar. 1992; page 91 - page 95; VOL. 2	
/TV/	2	Y. YANG, N. P. GALATSANOS, A.K.KATSAGGELOS; Regularized reconstruction to reduce blocking artifact of block discrete cosine transform compressed image; IEEE Trans. Circuits Syst. Video Technol.; Dec. 1993; page 421- page 432; VOL. 3	
/TV/	3	Y. YANG, N. P. GALATSANOS, A.K.KATSAGGELOS; Projection-based spatially adaptive reconstruction of block-transform compressed images; IEEE Trans. Image Processing; July 1995; page 896 -page 908; VOL. 4	
/TV/	4	T.MEIER, K.N.NGAN, G. GREBBIN; Reduction of blocking artifacts in image and video coding; IEEE Trans. Circuits Syst. Video Technol; April 1999; page 490 - page 500; VOL.9	
/TV/	5	T.P. O'ROURKE, R.L. STEVENSON; Improved image decompression for reduced transform coding artifacts; IEEE TRANS. Circuits Syst. Video Technol.; Dec. 1995; page 490- page499; VOL.5	
/TV/	6	Y.L. LEE, H.C. KIM, H.W.PARK; Blocking effect reduction of JPEG images by signal adaptive filtering; IEEE Trans. Image Processing; Feb. 1998; page 229-page 234; VOL.7	
/TV/	7	H.W. PARK, Y.L.LEE; A postprocessing method for reducing quantization effect in low bit-rate moving picture coding; IEEE Trans. Circuits Syst. Video Technol; Feb.1999; page 161-page 171; VOL.9	
/TV/	8	S.D.KIM, J. YI, H.M.KIM, J.B.RA; A deblocking filter with two separate modes in block-based video coding; IEEE Trans. Circuits Syst. Video Technol; Feb.1999; page 156-appe 160; VOL.9	
/TV/	9	P.LIST, A.JOCH, J.LAINEMA, G.B.JONTEGAARD, M.KARCZEWICZ; Adaptive deblocking filter; IEEE Trans. Circuits Syst. Video Technol; July 2003; page 614-page 619; VOL.13	

Examiner Signature	/Tung Vo/	Date Considered	08/31/2007
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)

Application Number	10709338
Filing Date	2004-04-29
First Named Inventor	Do-Kyoung Kwon
Art Unit	2621
Examiner Name	DASTOURI, MEHRDAD Vo, Tung
Attorney Docket Number	MTKP0167USA

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/TV/	1	WO 03/094521	WO	A1	2003-11-13			<input type="checkbox"/>
If you wish to add additional Foreign Patent Document citation information please click the Add button							Add	
NON-PATENT LITERATURE DOCUMENTS							Remove	
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**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
(Not for submission under 37 CFR 1.99)

Application Number	10709338
Filing Date	2004-04-29
First Named Inventor	Do-Kyoung Kwon
Art Unit	2621
Examiner Name	BASTOURI, MEHRDAD Vo, Tung
Attorney Docket Number	MTKP0167USA

1		<input type="checkbox"/>
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Examiner Signature	/Tung Vo/	Date Considered	08/31/2007
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¹ See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. ² Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). ³ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁴ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁵ Applicant is to place a check mark here if English language translation is attached.

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
(Not for submission under 37 CFR 1.99)

Application Number	10709338
Filing Date	2004-04-29
First Named Inventor	Do-Kyoung Kwon
Art Unit	2621
Examiner Name	BASTOUR, MEHRDAD Vo, Tung
Attorney Docket Number	MTKP0167USA

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

☐ That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

☐ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

☐ See attached certification statement.

☐ Fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☒ None

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/WINSTON HSU/	Date (YYYY-MM-DD)	2007-05-02
Name/Print	WINSTON HSU	Registration Number	41526

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